

## Abstract

The invention aims at providing a method of fabricating an amorphous or polycrystalline layer on an insulating region which compared to known  
5 methods increases the thickness of the amorphous or polycrystalline layer and improves the homogeneity of the precipitation thus resulting in lower surface roughness while at least maintaining the insulating properties of the insulating region. To this end a suitable seeding layer (28, 29), preferably of silicon nitride, is deposited so that the seeding capacity and insulating  
10 properties of the SiO<sub>2</sub> insulating region (14, 31) during precipitation of the amorphous or polycrystalline Si or SiGe layers (15, 16, 17, 33) are improved.